

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

December

2005

Prepared by
The National Centre for Geophysical Research
Bhannes

*P.o.b. : 165432
Ashrafyeh Beirut 1100-2040*

*Tel : +9614-981885
Fax : +9614-981886
Email : geophys@cnrs.edu.lb*

GENERAL BULLETIN INFORMATION

The National Centre for Geophysical Research is a governmental agency established 1975 in Lebanon by the National Council for Scientific Research (CNRS). The mission of the Centre, among other assignments, is the monitoring of seismic activity within the national territory. Currently, the national seismic network is under deployment; it has been officially registered as GRAL, an acronym for Geophysical Research Arrays of Lebanon. Station coordinates and status are given below.

Since 1993, the Centre has been participating in a regional initiative of the UNESCO and the USGS known as RELEMR, i.e. Reducing Earthquake Losses in the Eastern Mediterranean Region.

Within this framework, the Centre routinely contributes to the database set up for this purpose and maintained by the Euro-Mediterranean Seismological Centre (EMSC). For coherence, the Centre has adopted the recommended seismic analysis system SEISAN developed by Jens Havskov and Lars Ottemoller from the University of Bergen, Norway.

The location program currently used for locating earthquakes is Hypocenter (Lienert et al., 1986). Plane parallel layers are assumed for local and regional events, while the IASPEI travel time tables are used for distant events.

The velocity model used for all local and regional events is the currently adopted by the RELEMR initiative.

P-wave velocity (km/sec)	depth to top of layer (km)
6.2	0.0
6.8	14.0
8.05	34.0
8.25	50.0
8.5	80.0

Magnitudes are calculated from coda duration. The coda wave magnitude is estimated via the formula:

$$M_c = 0.08 + 1.63 * \log_{10}(T) + 0.009 * D.$$

where T is the coda duration (sec) and D is the epicentral distance (km). The coefficients were adopted at the beginning of operation of our Centre in 1980 and thus are still in use for the sake of continuity.

All available coda values are used for magnitude calculations. No station corrections are used for either travel times or magnitudes calculations. The Vp/Vs velocity ratio used in both layered models above is 1.74.

As a general policy, neither depths nor epicenters are fixed unless stated since this might restrict later use of the data. As a consequence, some event locations might be unrealistic like zero depth earthquakes or teleseismic locations off by 1000 km. However, the locations are based on the available data and reflect the location procedure and the models used.

STATIONS USED

The stations listed below are operated by the National Centre for Geophysical Research. They form the basic setup of the National Seismic Network of Lebanon.

However, readings from other cooperating agencies are also used in locating the events and thus more stations may appear in the event lists than in the station list; it is worth to mention the systematic use of arrival times from the Cypriot seismic network CSS in order to constrain events corresponding to an active zone off the Lebanese shorelines.

STATION	LATITUDE	LONGITUDE	HEIGHT (m)	NAME	COMMENTS
BHL	3354.25N	3539.25E	1000	BHANNES	Opened May 1980
HWQ	3416.68N	3556.78E	1161	HAWQA	Opened Jan 2001
MATL	3329.32N	3519.78E	5	MATARIH	Opened Nov 2000
FKH	3414.13N	3624.11E	1170	FAKEHEH	Opened Dec 2004
RCY	3329.08N	3549.13E	1360	RACHAYA	Scheduled 2003
DWR	3323.13N	3524.08E	420	DWEIR	Scheduled 2003

MACROSEISMIC DATA

Macroseismic data, if available, are included in the bulletin.

MONTHLY EPICENTER MAPS

Maps will be found on the last page.

ELECTRONIC PUBLICATION

This provisional bulletin will be available for download in pdf format on:
<http://www.cnrs.edu.lb/geophysicalresearch/>

REFERENCES

- Havskov, J. and Ottemoller, L.(2001). SEISAN: The Earthquake Analysis Software.
-version 7.2-
Institute of Solid Earth Physics, University of Bergen.
<http://www.ifjff.uib.no/seismo/software/seisan.html>
- Lienert, B.R., Berg, E. and Frazer, L.N.(1986). Hypocenter: An earthquake location method using centered, scaled, and adaptively least squares. Bull. Seism. Soc. Am., 76., pp 771-783.

Abbreviations:

TIME: Origin time in UTC (hr. min. and sec.) or data file onset time if event is not located.

LAT: Latitude of epicenter

LON: Longitude of epicenter

DEPTH: Focal depth in kilometer (trailing F indicates fixed depth)

AGENCY: REL throughout the bulletin, aka. Geophysical Research Lebanon

MAGNITUDES: Up to 3 different magnitudes can be given followed by type and reporting agency, e.g. 3.1 MC GRL - coda magnitude calculated according to GRL standard parameters.

RMS: Root mean square value of travel time residuals

STAT: Station code

CO: Component; S:short period, L:long period, B:broadband.

DIST: Epicenter distance (km)

AZI: Azimuth from source to station

PHAS: Phase; The first letter characterizes onset E(mergent) or I(mpulsive)

P: Polarity (C for compression, D for dilatation)

HR: Hour

MN: Minute

SECON: Seconds

TRES: Residual (seconds)

CODA: Signal duration in seconds

AMPL: Ground Amplitude ($0.5 \times (\text{peak to peak})$), (nm) at period PERI

PERI: Period where amplitude is measured

BAZ: Back azimuth (station to event)

ARES: Back azimuth residual

VELO: Apparent phase velocity (km/sec)

WT: Weight of phase in the location

*: An asterisk before the phase arrival time implies a potential timing error. If an S phase is read, differential S-P times will be used in the hypocenter location.

December 1 2005 Hour: 3:24 53.5 Fiji M=5.3 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		327	11.30								
BHL	BZ			EP		327	12.76								

December 1 2005 Hour: 12:39 45.3 Lat: 33.81N Lon: 35.64E Depth: 17 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.6 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ	11	8	IPg		1239	47.84	-0.8	60			189	0	32.4	1.0
BHL	SE	11	8	ISg		1239	51.53	0.4							1.0
MATL	SZ	45	219	EPg		1239	53.40	0.4							1.0
HWQ	SZ	60	29	EPg		1239	54.47	-0.6							1.0
HWQ	SE	60	29	ESg		1240	2.98	0.6							1.0

December 1 2005 Hour: 15:14 29.7 Lat: 33.81N Lon: 36.87E Depth: 0 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	64	318	EPg		1514	39.84	-0.2	68						1.0
FKH	SN	64	318	ESg		1514	47.44	-0.2							1.0
HWQ	SZ	100	302	EPg		1514	46.25	0.4							1.0
HWQ	SN	100	302	ESg		1514	57.94	0.3							1.0
BHL	SZ	113	276	EPg		1514	47.73	-0.2							1.0
BHL	SN	113	276	ESg		1515	1.21	-0.1							1.0

December 1 2005 Hour: 21:6 42.2 Lat: 33.31N Lon: 35.51E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MATL	SZ	26	321	EPg		21 6	46.34	0.0							1.0
BHL	SZ	68	12	EPg		21 6	53.75	0.7	55						1.0
BHL	SE	68	12	ESg		21 7	0.48	-0.6							1.0
HWQ	SZ	115	21	EPg		21 7	0.21	-0.5							1.0
HWQ	SE	115	21	ESg		21 7	15.07	0.6							1.0
FKH	SZ	132	39	EPg		21 7	3.29	-0.2							1.0
FKH	SE	132	39	ESg		21 7	19.26	0.0							1.0

December 2 2005 Hour: 3:18 1.4 Sumatra M=5.2 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		318	20.32								

December 2 2005 Hour: 11:24 44.8 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1125	13.09								
FKH	SN			ESg		1125	15.95								
HWQ	SZ			EPg		1125	15.21								
HWQ	SE			ESg		1125	20.19								

December 2 2005 Hour: 13:22 8.4 Honshu M=6.4 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1325	22.19								
FKH	SZ			EP		1325	18.89								

December 3 2005 Hour: 16:20 54.4 Ryukyu M=6.1 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1622	35.01								
FKH	SZ			EP		1622	31.54								

December 3 2005 Hour: 21:34 2.0 Iran M=4.1 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPn		2137	7.43								
HWQ	SZ			EPn		2137	12.40								
BHL	BZ			EPn		2137	12.91								

December 4 2005 Hour: 4:51 57.5 Kermadec M=5.1 Agency: REL Distant
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 452 42.57

December 4 2005 Hour: 12:16 47.5 Agency: REL Local
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 FKH SZ EPg 1217 15.27
 HWQ SZ EPg 1217 23.52
 FKH SN ESg 1217 20.84
 HWQ SN ESg 1217 32.06

December 4 2005 Hour: 13:49 30.5 Lat: 34.42N Lon: 36.89E Depth: 0 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.3 secs
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 FKH SZ 49 246 EPg 1349 37.93 -0.5 69 1.0
 FKH SE 49 246 ESg 1349 43.95 -0.3 1.0
 HWQ SZ 88 260 EPg 1349 44.99 0.3 1.0
 HWQ SE 88 260 ESg 1349 55.16 -0.1 1.0
 BHL SZ 127 244 EPg 1349 51.24 0.2 1.0
 BHL SE 127 244 ESg 1350 6.62 0.4 1.0

December 4 2005 Hour: 15:10 0.3 Agency: REL Local
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ SZ EPg 1511 4.68
 BHL BE ESg 1511 5.28
 HWQ SE ESg 1511 11.68
 BHL BZ EPg 1511 2.73

December 4 2005 Hour: 15:19 36.2 Lat: 33.51N Lon: 35.41E Depth: 15 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.2 secs
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 MATL SZ 8 252 EPg 1519 39.00 0.0 1.0
 BHL BZ 49 27 EPg 1519 44.17 -0.3 60 1.0
 BHL BN 49 27 ESg 1519 50.56 0.1 1.0
 HWQ SZ 98 30 EPg 1519 52.09 0.4 1.0
 HWQ SN 98 30 ESg 1520 3.02 -0.1 1.0
 FKH SZ 122 48 EPg 1519 54.98 -0.2 1.0
 FKH SE 122 48 ESg 1520 9.23 0.1 1.0

December 4 2005 Hour: 16:38 54.7 Lat: 33.81N Lon: 35.63E Depth: 12 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.6 secs
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL SZ 11 11 IPg 1638 56.82 -0.7 58 1.0
 BHL SE 11 11 ISg 1638 59.67 0.1 1.0
 MATL SZ 46 218 EPg 1639 2.86 0.5 1.0
 HWQ SZ 59 29 EPg 1639 4.26 -0.3 1.0
 HWQ SE 59 29 ESg 1639 12.37 0.6 1.0
 FKH SZ 85 56 EPg 1639 7.76 -0.9 1.0
 FKH SE 85 56 ESg 1639 19.42 0.5 1.0

December 4 2005 Hour: 22:31 48.7 Honshu M=5.6 Agency: REL Distant
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 2232 41.11

December 5 2005 Hour: 12:26 36.6 Tanganyika M=6.9 Agency: REL Distant
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 1227 32.28
 FKH SZ EP 1227 37.06

December 5 2005 Hour: 13:5 0.5

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		13 6	15.81								
HWQ	SN			ESg		13 6	29.90								
FKH	SN			ESg		13 6	20.94								
HWQ	SZ			EPg		13 6	22.79								

December 5 2005 Hour: 15:36 17.7 Lat: 33.36N Lon: 35.46E

Depth: 23 Agency: REL Local

Magnitudes: 2.6MC REL

Rms: 0.8 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MATL	SZ	18	319	EPg		1536	22.80	0.5	33						1.0
BHL	SZ	63	17	EPg		1536	27.06	-1.1							1.0
BHL	SN	63	17	ESg		1536	35.16	-0.7							1.0
HWQ	SZ	111	24	EPg		1536	35.47	0.3							1.0
HWQ	SN	111	24	ESg		1536	49.08	1.0							1.0

December 6 2005 Hour: 4:43 23.2

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EPg		444	34.39								
HWQ	SE			ESg		444	39.43								
FKH	SN			ESg		444	49.39								

December 6 2005 Hour: 14:13 0.4

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1414	13.33								
HWQ	SZ			EPg		1414	16.35								
FKH	SE			ESg		1414	18.58								
HWQ	SE			ESg		1414	21.83								

December 7 2005 Hour: 14:15 39.7

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1416	3.14								
HWQ	SN			ESg		1416	19.43								
FKH	SN			ESg		1416	7.81								
HWQ	SZ			EPg		1416	10.28								

December 7 2005 Hour: 14:24 46.2 Lat: 34.43N Lon: 36.81E

Depth: 0 Agency: REL Local

Magnitudes: 2.9MC REL

Rms: 0.6 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	44	240	EPg		1424	52.43	-0.9	54						1.0
FKH	SN	44	240	ESg		1424	58.09	-0.4							1.0
HWQ	SZ	82	258	EPg		1424	59.75	0.3							1.0
HWQ	SN	82	258	ESg		1425	8.89	-0.3							1.0
BHL	SZ	122	242	EPg		1425	6.42	0.5							1.0
BHL	SN	122	242	ESg		1425	21.13	0.7							1.0

December 7 2005 Hour: 23:50 2.0 Kermadec M=6.1

Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2352	37.11								
FKH	SZ			EP		2352	44.05								

December 8 2005 Hour: 5:51 33.4 Kermadec M=5.9

Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		552	3.65								

December 8 2005 Hour: 12:14 36.6 Lat: 33.79N Lon: 36.49E

Depth: 67 Agency: REL Local

Magnitudes: 3.0MC REL

Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	50	351	EPg		1214	48.50	0.2	56						1.0
FKH	SE	50	351	ESg		1214	56.85	-0.1							1.0
HWQ	SZ	73	317	EPg		1214	50.24	-0.2							1.0
HWQ	SE	73	317	ESg		1215	0.76	0.1							1.0
BHL	SN	78	279	ESg		1215	1.43	0.0							1.0

December 8 2005 Hour: 13:29 1.2

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1329	31.64								
HWQ	SZ			EPg		1329	34.15								
FKH	SN			ESg		1329	35.07								
HWQ	SN			ESg		1329	39.19								

December 8 2005 Hour: 13:48 5.6 Lat: 33.76N Lon: 36.45E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.7 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	53	355	EPg		1348	14.36	0.2	48						1.0
FKH	SN	53	355	ESg		1348	19.60	-0.9							1.0
HWQ	SZ	74	321	EPg		1348	18.02	0.5							1.0
HWQ	SN	74	321	ESg		1348	27.30	0.9							1.0
BHL	SN	76	282	ESg		1348	26.14	-0.7							1.0

December 8 2005 Hour: 13:56 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1356	28.09								
HWQ	SZ			EPg		1356	35.44								
FKH	SN			ESg		1356	33.34								
HWQ	SN			ESg		1356	43.94								

December 8 2005 Hour: 14:12 25.8 Lat: 34.41N Lon: 36.78E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	40	241	EPg		1412	31.76	-0.5	56						1.0
FKH	SE	40	241	ESg		1412	36.90	-0.1							1.0
HWQ	SZ	78	259	EPg		1412	38.84	0.5							1.0
HWQ	SN	78	259	ESg		1412	47.43	-0.3							1.0
BHL	SE	118	242	ESg		1412	59.24	0.3							1.0

December 9 2005 Hour: 13:57 48.4 Lat: 34.12N Lon: 35.68E Depth: 0 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ	24	185	EPg		1357	51.92	-0.3	34						1.0
BHL	SN	24	185	ESg		1357	55.11	0.1							1.0
HWQ	SZ	31	54	EPg		1357	53.04	-0.3							1.0
HWQ	SE	31	54	ESg		1357	56.99	0.0							1.0
FKH	SZ	68	79	EPg		1358	0.23	0.8							1.0
FKH	SE	68	79	ESg		1358	7.17	-0.3							1.0

December 9 2005 Hour: 13:58 24.0 Lat: 34.15N Lon: 35.59E Depth: 15 Agency: REL Local
Magnitudes: 2.4MC REL Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ	28	167	EPg		1358	28.72	-0.4	27						1.0
BHL	SE	28	167	ESg		1358	33.20	0.2							1.0
HWQ	SZ	36	66	EPg		1358	30.81	0.4							1.0
HWQ	SN	36	66	ESg		1358	34.85	-0.2							1.0
FKH	SE	76	82	ESg		1358	45.18	0.0							1.0

December 9 2005 Hour: 14:33 14.8 Lat: 34.79N Lon: 26.91E Depth: 0 Agency: REL Regional
Magnitudes: 4.8MC REL Rms: 0.9 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MATL	SZ	790	98	EPn		1435	0.29	1.3							1.0
BHL	SZ	811	95	EPn		1434	59.91	-1.7							1.0
BHL	SE	811	95	Sn		1436	20.01	-0.7							1.0
HWQ	SZ	832	91	EPn		1435	4.39	0.1							1.0
HWQ	SN	832	91	Sn		1436	25.53	0.3							1.0
FKH	SZ	874	91	EPn		1435	9.71	0.2	247						1.0
FKH	SE	874	91	Sn		1436	34.77	0.4							1.0

December 10 2005 Hour: 0:8 4.1 Turkey M=5.2 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPn		011	22.76								
HWQ	SZ			EPn		011	25.82								
BHL	BZ			EPn		011	31.69								
MATL	SZ			EPn		011	38.21								

December 10 2005 Hour: 12:36 22.4 Lat: 34.40N Lon: 36.73E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	36	239	EPg		1236	27.30	-0.8	58						1.0
FKH	SE	36	239	ESg		1236	32.13	-0.2							1.0
HWQ	SZ	74	259	EPg		1236	34.72	0.5							1.0
HWQ	SN	74	259	ESg		1236	42.67	-0.4							1.0
BHL	SZ	114	241	EPg		1236	41.14	0.4							1.0
BHL	SE	114	241	ESg		1236	54.90	0.6							1.0

December 10 2005 Hour: 16:42 13.3 Lat: 33.35N Lon: 35.22E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MATL	SZ	19	33	EPg		1642	15.97	-0.3	45						1.0
BHL	SZ	74	33	EPg		1642	25.12	0.0							1.0
BHL	SE	74	33	ESg		1642	33.69	-0.2							1.0
HWQ	SZ	123	33	EPg		1642	33.46	0.3							1.0
HWQ	SN	123	33	ESg		1642	48.06	0.2							1.0

December 11 2005 Hour: 10:36 12.5 Lat: 34.02N Lon: 36.65E Depth: 30 Agency: REL Local
Magnitudes: 3.2MC REL Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	33	317	EPg		1036	19.34	-0.2	76						1.0
FKH	SN	33	317	ESg		1036	24.81	0.1							1.0
HWQ	SZ	71	294	EPg		1036	24.43	0.1							1.0
HWQ	SN	71	294	ESg		1036	33.10	0.0							1.0
BHL	SZ	93	263	EPg		1036	27.54	0.1							1.0
BHL	SN	93	263	ESg		1036	38.38	-0.1							1.0

December 11 2005 Hour: 11:20 1.2 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1121	19.18								
HWQ	SZ			EPg		1121	26.55								
FKH	SE			ESg		1121	24.31								
HWQ	SE			ESg		1121	36.20								

December 11 2005 Hour: 14:37 48.7 New Britain M=6.7 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1439	27.38								

December 12 2005 Hour: 5:9 52.3 Fiji M=5.5 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		510	19.99								
BHL	BZ			EP		510	21.20								

December 12 2005 Hour: 10:51 1.1 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1051	24.74								
HWQ	SE			ESg		1051	42.34								
FKH	SN			ESg		1051	30.86								
HWQ	SZ			EPg		1051	32.04								

December 12 2005 Hour: 12:47 55.9 Lat: 33.71N Lon: 35.48E Depth: 15 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ	27	37	IPg		1248	1.23	0.3	50			256	39	25.3	1.0
BHL	SN	27	37	ISg		1248	4.52	-0.1							1.0
HWQ	SZ	76	34	EPg		1248	7.81	-0.3							1.0
HWQ	SN	76	34	ESg		1248	17.35	0.2							1.0

December 12 2005 Hour: 13:46 1.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ			EPg		1347	21.27								
HWQ	SE			ESg		1347	28.37								
BHL	SE			ESg		1347	25.22								
HWQ	SZ			EPg		1347	22.83								

December 12 2005 Hour: 13:55 12.0 Lat: 34.32N Lon: 36.54E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	16	233	EPg		1355	14.62	0.0	41						1.0
FKH	SE	16	233	ESg		1355	16.06	-0.5							1.0
HWQ	SZ	55	265	EPg		1355	20.91	0.0							1.0
HWQ	SN	55	265	ESg		1355	27.29	-0.2							1.0
BHL	SN	94	241	ESg		1355	38.97	0.6							1.0

December 12 2005 Hour: 14: 9 1.3 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		14 9	41.99								
HWQ	SZ			EPg		14 9	43.97								
FKH	SE			ESg		14 9	45.24								
HWQ	SN			ESg		14 9	49.28								

December 12 2005 Hour: 15: 4 0.2 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPn		15 4	56.64								
HWQ	SZ			EPn		15 4	57.13								

December 12 2005 Hour: 15:48 25.6 Lat: 33.87N Lon: 36.22E Depth: 40 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	44	22	IPg		1548	34.75	0.3	50						1.0
FKH	SE	44	22	ESg		1548	40.87	-0.2							1.0
HWQ	SZ	52	330	EPg		1548	35.09	-0.3							1.0
HWQ	SE	52	330	ESg		1548	42.80	0.2							1.0
BHL	SZ	53	274	EPg		1548	35.48	0.0							1.0

December 12 2005 Hour: 21:12 0.7 Sea of Japan M=5.8 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2113	27.95								
FKH	SZ			EP		2113	24.64								

December 12 2005 Hour: 21:51 55.7 Hindu kush M=6.6 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2153	26.86								
FKH	SZ			EP		2153	20.79								

December 13 2005 Hour: 3:29 29.1 Fiji M=6.6 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		335	38.96								

December 13 2005 Hour: 12:18 22.2 Lat: 33.31N Lon: 34.95E Depth: 10 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MATL	SZ	41	60	EPg		1218	29.11	0.1	44						1.0
BHL	SZ	93	44	EPg		1218	37.04	-0.3							1.0
BHL	SN	93	44	ESg		1218	48.58	0.0							1.0
HWQ	SZ	142	40	EPg		1218	45.46	0.2							1.0
HWQ	SN	142	40	ESg		1219	2.27	0.0							1.0
FKH	SZ	170	52	EPg		1218	49.64	0.0							1.0
FKH	SN	170	52	ESg		1219	9.95	0.0							1.0

December 13 2005 Hour: 21:41 0.1 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EPn		2142	8.42								
FKH	SZ			EPn		2142	12.18								

December 13 2005 Hour: 23:23 52.8 Lat: 33.74N Lon: 35.70E Depth: 14 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ	19	346	EPg		2323	56.03	-0.6							1.0
BHL	SE	19	346	ISg		2323	59.61	0.1							1.0
MATL	SZ	45	231	EPg		2324	0.80	0.5							1.0
HWQ	SZ	64	20	EPg		2324	3.20	-0.1							1.0
HWQ	SE	64	20	ESg		2324	11.68	0.5							1.0
FKH	SZ	85	49	EPg		2324	5.93	-0.7	66						1.0
FKH	SE	85	49	ESg		2324	17.37	0.4							1.0

December 14 2005 Hour: 11:13 24.0 Lat: 33.69N Lon: 37.01E Depth: 0 Agency: REL Local
Magnitudes: 3.3MC REL Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	83	317	EPg		1113	37.27	-0.1	84						1.0
FKH	SN	83	317	ESg		1113	47.24	0.0							1.0
HWQ	SZ	118	304	EPg		1113	43.22	0.1							1.0
HWQ	SN	118	304	ESg		1113	57.15	0.0							1.0
BHL	SZ	128	281	EPg		1113	44.66	0.0							1.0

December 14 2005 Hour: 12:47 46.3 Lat: 34.15N Lon: 35.60E Depth: 27 Agency: REL Local
Magnitudes: 3.2MC REL Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	27	170	EPg		1247	52.42	0.0							1.0
BHL	BN	27	170	ESg		1247	56.86	0.0							1.0
HWQ	SZ	35	65	EPg		1247	53.12	-0.1							1.0
HWQ	SE	35	65	ESg		1247	58.47	0.1							1.0
FKH	SZ	74	82	EPg		1247	58.56	0.1	70						1.0
FKH	SE	74	82	ESg		1248	7.48	0.0							1.0

December 14 2005 Hour: 13:45 0.5 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1345	36.49								
HWQ	SN			ESg		1345	52.82								
FKH	SN			ESg		1345	41.36								
HWQ	SZ			EPg		1345	45.24								

December 14 2005 Hour: 13:53 46.7 Lat: 34.36N Lon: 36.83E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	42	250	EPg		1353	52.95	-0.5	58						1.0
FKH	SN	42	250	ESg		1353	58.32	-0.1							1.0
HWQ	SZ	82	264	EPg		1354	0.37	0.5							1.0
HWQ	SN	82	264	ESg		1354	9.49	-0.2							1.0
BHL	SN	120	245	ESg		1354	20.58	0.3							1.0

December 14 2005 Hour: 14: 7 1.1

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		14 7	30.43								
HWQ	SZ			EPg		14 7	37.65								
FKH	SE			ESg		14 7	36.01								
HWQ	SE			ESg		14 7	46.83								

December 14 2005 Hour: 15:26 57.0 Lat: 33.85N

Lon: 35.56E Depth: 14 Agency: REL Local

Magnitudes: 2.8MC REL

Rms: 0.7 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ	11	53	IPg		1526	59.56	-0.4	43						1.0
BHL	SE	11	53	ISg		1527	2.54	0.3							1.0
MATL	SZ	45	209	EPg		1527	5.20	0.6							1.0
HWQ	SZ	60	36	EPg		1527	6.42	-0.5							1.0
HWQ	SN	60	36	ESg		1527	15.07	0.7							1.0
FKH	SZ	89	61	EPg		1527	10.22	-1.3							1.0
FKH	SN	89	61	ESg		1527	22.95	0.6							1.0

December 14 2005 Hour: 15:29 26.1 Lat: 34.56N

Lon: 36.34E Depth: 11 Agency: REL Local

Magnitudes: 2.9MC REL

Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	36	171	EPg		1529	31.66	-0.6	53						1.0
FKH	SN	36	171	ESg		1529	37.22	0.4							1.0
HWQ	SZ	48	229	IPg		1529	33.88	-0.2							1.0
HWQ	SE	48	229	ESg		1529	40.08	0.1							1.0
BHL	SZ	97	221	EPg		1529	42.54	0.8							1.0
BHL	SE	97	221	ESg		1529	52.91	-0.5							1.0

December 14 2005 Hour: 16:11 57.0 Lat: 33.32N

Lon: 35.37E Depth: 26 Agency: REL Local

Magnitudes: 2.8MC REL

Rms: 0.9 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MATL	SZ	19	349	EPg		1612	2.51	0.5	43						1.0
BHL	SZ	70	22	EPg		1612	7.10	-1.4							1.0
BHL	SE	70	22	ESg		1612	16.29	-0.7							1.0
HWQ	SZ	119	27	EPg		1612	16.17	0.6							1.0
HWQ	SE	119	27	ESg		1612	30.31	1.0							1.0

December 15 2005 Hour: 14:47 27.3 Lat: 34.36N

Lon: 36.47E Depth: 0 Agency: REL Local

Magnitudes: 2.5MC REL

Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	15	205	EPg		1447	29.69	-0.1	31						1.0
FKH	SE	15	205	ESg		1447	31.50	0.0							1.0
HWQ	SZ	49	260	EPg		1447	35.35	0.1							1.0
HWQ	SN	49	260	ESg		1447	40.96	-0.2							1.0
BHL	SE	91	237	ESg		1447	52.91	0.2							1.0

December 17 2005 Hour: 12:37 43.2 Lat: 34.21N

Lon: 35.76E Depth:135 Agency: REL Local

Magnitudes: 3.5MC REL

Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	18	67	EPg		1238	0.54	-0.4	102						1.0
HWQ	SN	18	67	ESg		1238	14.18	0.1							1.0
BHL	SZ	36	196	EPg		1238	1.81	0.5							1.0
MATL	SZ	90	207	ESg		1238	19.25	-0.1							1.0

December 17 2005 Hour: 13:35 39.5 Lat: 35.06N

Lon: 35.99E Depth: 15 Agency: REL Local

Magnitudes: 3.1MC REL

Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	87	182	EPg		1335	53.58	0.2	63						1.0
HWQ	SE	87	182	ESg		1336	3.29	-0.3							1.0
BHL	SZ	132	193	EPg		1336	0.38	0.4							1.0
BHL	SE	132	193	ESg		1336	15.40	0.3							1.0
MATL	SZ	185	199	EPg		1336	7.02	-0.6							1.0

December 18 2005 Hour: 13:29 45.2 Lat: 34.33N Lon: 36.78E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.6 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	37	254	EPg		1329	50.15	-1.0	39						1.0
FKH	SE	37	254	ESg		1329	55.45	0.0							1.0
HWQ	SZ	77	266	EPg		1329	57.62	-0.1							1.0
HWQ	SE	77	266	ESg		1330	7.18	0.3							1.0
BHL	SZ	114	246	EPg		1330	4.66	1.0							1.0
BHL	SN	114	246	ESg		1330	17.07	-0.2							1.0

December 21 2005 Hour: 7:21 3.8 Minahassa M=6.4 Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		721	59.88								
FKH	SZ			EP		721	57.26								

December 21 2005 Hour: 13:15 28.6 Lat: 34.35N Lon: 36.79E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	38	251	EPg		1315	33.72	-1.0	54						1.0
FKH	SN	38	251	ESg		1315	39.09	-0.1							1.0
HWQ	SZ	78	265	EPg		1315	41.67	0.5							1.0
HWQ	SN	78	265	ESg		1315	50.44	-0.1							1.0
BHL	SZ	115	245	EPg		1315	47.77	0.5							1.0
BHL	SE	115	245	ESg		1316	1.24	0.2							1.0

December 22 2005 Hour: 9:14 1.3 Crete M=3.8 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPn		915	0.91								
HWQ	SZ			EPn		914	55.94								

December 22 2005 Hour: 12:19 1.6 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1219	57.96								
HWQ	SZ			EPg		1220	0.38								
FKH	SE			ESg		1220	1.33								
HWQ	SN			ESg		1220	5.55								

December 22 2005 Hour: 12:46 43.4 Lat: 33.90N Lon: 36.86E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	56	311	EPg		1246	51.78	-0.7	47						1.0
FKH	SN	56	311	ESg		1246	59.46	0.2							1.0
HWQ	SZ	94	297	EPg		1246	59.42	0.8							1.0
HWQ	SN	94	297	ESg		1247	9.73	-0.1							1.0
BHL	SN	112	271	ESg		1247	14.63	-0.1							1.0

December 22 2005 Hour: 14:9 16.9 Lat: 34.25N Lon: 36.87E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	43	268	EPg		14 9	23.10	-0.7	61						1.0
FKH	SN	43	268	ESg		14 9	29.19	0.2							1.0
HWQ	SZ	85	273	EPg		14 9	31.35	0.7							1.0
HWQ	SE	85	273	ESg		14 9	40.47	-0.3							1.0
BHL	SE	118	252	ESg		14 9	50.15	0.0							1.0

December 22 2005 Hour: 17:23 1.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1724	19.12								
HWQ	SN			ESg		1724	33.19								
FKH	SN			ESg		1724	25.00								

December 22 2005 Hour: 19:39 9.4 Lat: 33.97N Lon: 35.90E Depth: 20 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ	24	253	EPg		1939	14.23	-0.2	38						1.0
BHL	SN	24	253	ESg		1939	18.27	0.1							1.0
HWQ	SZ	35	7	EPg		1939	16.47	0.6							1.0
HWQ	SE	35	7	ESg		1939	20.20	-0.4							1.0
FKH	SZ	55	57	EPg		1939	18.20	-0.4							1.0
FKH	SE	55	57	ESg		1939	25.68	0.2							1.0

December 23 2005 Hour: 7:11 0.5 Crete M=4.4 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EPn		712	20.22								

December 23 2005 Hour: 10:22 0.7 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	SZ			EPn		1022	36.88								
HWQ	SZ			EPn		1022	41.11								

December 26 2005 Hour: 13:34 35.1 Lat: 34.37N Lon: 36.80E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	39	248	EPg		1334	40.57	-0.8	51						1.0
FKH	SE	39	248	ESg		1334	45.86	-0.2							1.0
HWQ	SZ	79	263	EPg		1334	47.88	0.1							1.0
HWQ	SN	79	263	ESg		1334	57.28	0.1							1.0
BHL	SZ	117	244	EPg		1334	54.68	0.7							1.0
BHL	SN	117	244	ESg		1335	8.10	0.1							1.0

December 26 2005 Hour: 23:15 23.8 Iran M=5.1 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPn		2318	24.91								
HWQ	SZ			EPn		2318	31.71								
BHL	SZ			EPn		2318	35.02								

December 27 2005 Hour: 12:35 0.4 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1235	31.91								
HWQ	SZ			EPg		1235	38.71								
HWQ	SN			ESg		1235	49.98								
FKH	SN			ESg		1235	39.04								

December 27 2005 Hour: 18:31 38.2 Lat: 32.65N Lon: 37.85E Depth: 0 Agency: REL Regional
Magnitudes: 3.4MC REL Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	221	323	EPn		1832	12.19	0.3	86						1.0
FKH	SE	221	323	Sn		1832	36.59	-0.1							1.0
BHL	SZ	247	305	EPn		1832	15.12	0.1							1.0
BHL	SN	247	305	Sn		1832	42.28	0.0							1.0
HWQ	SZ	253	316	EPn		1832	15.31	-0.4							1.0
HWQ	SE	253	316	Sn		1832	43.64	0.1							1.0

December 27 2005 Hour: 21:54 7.4 Iran M=4.9 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPn		2157	25.28								
HWQ	SZ			EPn		2157	30.20								
BHL	SZ			EPn		2157	31.27								

December 28 2005 Hour: 13: 4 0.6

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		13 5	3.68								
HWQ	SZ			EPg		13 5	5.83								
HWQ	SN			ESg		13 5	11.38								
FKH	SE			ESg		13 5	7.43								

December 28 2005 Hour: 13:33 0.4

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1333	53.98								
HWQ	SZ			EPg		1334	1.28								
FKH	SE			ESg		1334	0.82								
HWQ	SN			ESg		1334	10.48								

December 28 2005 Hour: 13:48 28.8

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1348	56.54								
HWQ	SZ			EPg		1349	3.76								
FKH	SN			ESg		1349	1.66								
HWQ	SN			ESg		1349	14.10								

December 28 2005 Hour: 14: 6 12.9 Turkey M=4.2

Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPn		14 9	15.28								
HWQ	SZ			EPn		14 9	17.35								
BHL	BZ			EPn		14 9	24.18								

December 29 2005 Hour: 13:31 1.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1332	3.42								
HWQ	SZ			EPg		1332	10.51								
FKH	SN			ESg		1332	8.78								
HWQ	SN			ESg		1332	19.85								

December 29 2005 Hour: 13:41 0.8

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1342	10.42								
HWQ	SZ			EPg		1342	18.28								
FKH	SE			ESg		1342	15.59								
HWQ	SE			ESg		1342	28.39								

December 31 2005 Hour: 9: 4 1.1

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		9 4	33.05								
HWQ	SE			ESg		9 4	42.19								
FKH	SE			ESg		9 4	39.98								
HWQ	SZ			EPg		9 4	34.97								

December 31 2005 Hour: 10:39 0.7

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1039	35.61								
HWQ	SN			ESg		1039	50.52								
FKH	SE			ESg		1039	40.80								
HWQ	SZ			EPg		1039	41.81								

December 31 2005 Hour: 10:43 1.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EPg		1044	22.30								
HWQ	SN			ESg		1044	37.76								
FKH	SE			ESg		1044	28.71								
HWQ	SZ			EPg		1044	26.84								

December 31 2005 Hour: 12:23 49.1 Lat: 34.49N Lon: 36.92E Depth: 0 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.7 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	55	240	EPg		1223	57.30	-0.6	66						1.0
FKH	SN	55	240	ESg		1224	3.43	-1.0							1.0
HWQ	SZ	92	256	EPg		1224	3.92	0.0							1.0
HWQ	SN	92	256	ESg		1224	14.76	-0.1							1.0
BHL	SZ	133	241	EPg		1224	11.14	0.6							1.0
BHL	SN	133	241	ESg		1224	27.52	1.1							1.0

December 31 2005 Hour: 13:58 0.5 Egypt M=4.2 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EPn		14 0	21.36								
BHL	BZ			EPn		14 0	15.24								

Epicentral Map of Lebanon

DECEMBER 2005

Magnitudes

- Ml = 2
- Ml = 3
- Ml = 4
- Ml = 5

